

Carbon Tetrachloride Toxicity

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accepted with enthusiasm. Mention may be made particularly of those aimed at keeping down the bulk of material to be stored and the use of a folder rather than an envelope.

Most of the smaller hospitals are coping with a shortage of all categories of medical staff. A consultant's time is saved and his work eased if the notes are typed on a clearly marked folded sheet holding all the notes and correspondence related to his specialty. Considerable time is wasted and special investigations are repeated unnecessarily if notes are not quickly and easily read. Illegible longhand notes written consecutively regardless of the specialty gravely lower standards and morale of medical and other staff and of the standard of care available to the patient.

If notes are typed any form of fastener tends to waste secretarial time and causes damage to the notes. A folder with a pocket to prevent loss of its contents is simple, less frustrating, and no more expensive than the method recommended in the report. Many of us have tried and discarded different forms of fastener and clip.

The remarks from Hammersmith Hospital (20 November, p. 1242) relating to several of these points are very important.—I am, etc.,

London W.C.1. M. SPENCER HARRISON.

Carbon Tetrachloride Toxicity

SIR,—The widespread use of carbon tetrachloride, and proprietary products containing it, has undoubtedly resulted in a high incidence of accidental poisoning, though recent recognition of this danger has reduced the incidence of this. Nevertheless, severe symptoms may develop even after minimal contact with carbon tetrachloride, and may be delayed for several weeks. Often the patient is seriously ill on admission to hospital, and the history of exposure may neither be easily established nor considered. Toxicity is known to occur after either drinking the agent or inhaling the vapour.

Considerable individual sensitivity to carbon tetrachloride exists, but certain factors are known to influence the toxic effects. Most significant among these is the history of exposure to alcohol. Carbon tetrachloride dissolves in alcohol and is freely absorbed from the gastro-intestinal tract, and when both are taken together the toxicity is greatly increased. Alcohol is thought to increase the urinary excretion of carbon tetrachloride and may thus contribute to the observed nephrotoxic action.

In the following case report a very small quantity of carbon tetrachloride in proprietary form was accidentally ingested along with alcohol, with resulting severe hepato-renal damage.

The patient, a 53-year-old male, had been relatively well until two weeks before admission to the Victoria Hospital. At that time he had developed mild "influenza," with joint pain, mild headache, fever, and general malaise. Salicylates were administered, and while making himself a "hot toddy" he accidentally swallowed a mouthful of Thawpiti as well as a quantity of alcohol. He immediately spat out most of this, but undoubtedly swallowed a small amount. He felt nauseated, and shortly afterwards was actively sick. He made an initial good recovery but 24 hours afterwards again complained of

weakness and had a small haematemesis. His general condition improved on bed-rest, Aludrox (mist. alumin. hydrox.), and phenobarbitone. Ten days later he again became nauseated and disorientated, and progressive jaundice developed associated with general deterioration and hiccup.

On admission he was confused, incoherent, markedly dehydrated, and slightly jaundiced. His face and eyes were puffy, and a trace of oedema of both ankles was present. Pulse 70 per minute. Blood-pressure 205/105 mm. Hg. His abdomen appeared distended but no free fluid was found. The liver edge was palpable three fingerbreadths below the costal margin, and was very tender on palpation. Laboratory investigations: blood urea 408 mg./100 ml. Liver function tests showed intracellular damage with bilirubin 6.0 mg./100 ml. Serum glutamic pyruvic transaminase 100 I.U. Hb 92%. E.S.R. 40 mm. in the first hour. W.B.C. 7,100/c.mm. Treatment was instituted with intravenous therapy, strict fluid balance, electrolyte control, and he was given a high-carbohydrate, low-protein diet with supplements.

He responded well to therapy, and by the end of two weeks the blood urea had fallen to 26 mg./100 ml. Shortly after admission he developed a generalized rash especially in the flexures, and this was attributed to delayed skin reaction to carbon tetrachloride. The rash subsided as his condition improved.

When seen at the review clinic three, six, and nine months after discharge he was entirely well, and blood urea and liver-function tests were within normal limits.

Thus, in spite of the small ingested dose, in the presence of alcohol, serious but fortunately reversible hepato-renal damage occurred.

My thanks are due to Dr. J. W. Buchanan, under whose care the patient was admitted, for permission to publish this case.

—I am, etc.,

Victoria Hospital,
Kirkcaldy, East Fife.

D. H. K. SMITH.

Thymectomy and Myasthenia Gravis

SIR,—In the issue of 20 November (p. 1201) you quote Henson *et al.*,¹ and state that one of the categories of patients in whom operation is recommended is that with less than two years' history, under 30 years of age, and "in whom symptoms were not adequately controlled by drug treatment." You conclude as an indication for operation, " . . . in whom the disability is getting worse despite adequate medical treatment." Elsewhere,² we have shown that, irrespective of age and sex, the best prognosis to be expected is in those patients in whom thymectomy is undertaken as soon as possible after the onset of the disease.

My reason for writing is this. All too often we have patients referred who have been treated medically, perhaps for years, because they have shown good response to the drugs. Eventually, when increasing dosage of the anticholinesterase drug is required or the patient becomes less responsive to these drugs, then, and only then, is surgery considered. We feel that the optimum time for thymectomy is then past, though we do of course still offer the patient surgery.

Our contention is that thymectomy should be offered to the large majority of myasthenics as soon as possible after the onset of the disease. Possible exceptions being localized ocular myasthenia, the elderly patient with static weaknesses readily con-

trolled by drugs, and certain other cases with specific contraindications to surgery.

In myasthenia gravis associated with tumours of the thymus (and the majority can be diagnosed by the history, mediastinal tomography, and pneumo-mediastinography³) we too have found that the prognosis, poor as rule, can be improved by irradiation prior to thymectomy.—I am, etc.,

M. J. LANGE.

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Bed-belt for the Elderly

SIR,—Having worked in three geriatric units and having had the experience of dealing with old people falling out of bed, even out of their cot-bed, I have devised an "accident belt," hoping to prevent those preventable accidents which sometimes cause fractured femurs, head injuries, cuts, etc. The belt contains no metal, can be fixed to any bed (in hospital or outside) of any size and any width to suit requirements.

The specification of the belt is as follows: (1) Length 6 ft. (183 cm.) made in two parts—one part 4½ ft. (137 cm.) long and the other 1½ ft. (46 cm.). This allows the two parts to be joined at the side of the patient. For very obese patients a 7½-ft. (229-cm.) belt is made. (2) Width of the two parts is 6 in. (15.5 cm.) and 8 in. (20 cm.). (3) The belt is made out of a double layer of calico stuffed with cotton-wool. At each end that ties to the bed there are three rows of rubber buttons set 1 in. (2.5 cm.) apart from each other to allow for adjusting the length of the belt.

It works on the principle that when the patient has found his comfortable position and is dropping off to sleep the belt is buckled at the level of the umbilicus, allowing room for the patient to turn from side to side. Should the patient require any attention at night all that is necessary is to unlock the belt. It will be most useful for (1) restless, arthritic, and confused patients; (2) the hemiplegic and elderly in convalescent homes; (3) unsteady old people nursed at home by relatives.

If it prevents some of these accidents it will have served its purpose.—I am, etc.,

St. Michael's Hospital,
Enfield, Middlesex.

M. GEORGE.

Histoplasmosis or Leishmaniasis?

SIR,—In the case described as of histoplasmosis (Drs. P. J. S. Murray and R. A. Sladden, 11 September, p. 631) another diagnosis may be considered. Purpura, bleeding, leucopenia, and a greatly increased sedimentation rate are more characteristic of leishmaniasis than of histoplasmosis. Besides, the patient had had kala-azar years before, and the protozoan is able to reside *in vivo* harmlessly for years. The two diseases have been confused before.¹ The microbes in tissue are identical in appearance and can be differentiated by visualizing the kinetoplasts of leishmanias by Giemsa's stain. Unless the